AMENDMENTS TO THE CLAIMS

1. 1. (Original) A method of storing data into a database, the method comprising:

2. a loader application receiving data;

3. determining one or more routines that are associated with a type of said data, wherein

4. said one or more routines are implemented by a program that is external to

5. both said loader application and a database server that manages said database;

6. invoking said one or more routines;

7. in response to said one or more routines being invoked, said program performing

8. steps comprising:

9. creating a data structure that has one or more elements that correspond to one

10. or more attributes of said type; and

11. populating said one or more elements with one or more values that are

12. specified in said data, wherein said one or more values correspond to

13. said one or more attributes;

14. generating, based on said data structure, a data stream that conforms to a format of

15. data blocks of said database; and

16. writing said data into one or more data blocks in said database.

1. 2. (Original) The method of Claim 1, wherein a number of attributes of said type is not

2. defined to said loader application.

1. 3. (Original) The method of Claim 1, wherein a type of an attribute of said type of said

2. data is not defined to said loader application.

1 4. (Currently Amended) The method of Claim 1, wherein said creating, said populating,

2 said generating, and said writing are performed using a direct path loading approach

3 rather than a conventional path loading approach, and without causing a Structured

4 Query Language (SQL) engine to load said data.

1 5. (Currently Amended) The method of Claim 1, wherein said data structure is created,

2 by said program, in a memory space of ~~that is associated with~~ said loader application

3 rather than a memory space of said program.

1 6. (Original) The method of Claim 1, wherein said determining comprises locating

2 addresses of one or more routines that are in a same entry of a table as an identity of

3 said type.

1 7. (Original) The method of Claim 1, further comprising:

2 adding, to a table, an entry that indicates an association between said type and said

3 one or more routines.

1 8. (Currently Amended) The method of Claim 1, wherein said invoking comprises

2 invoking one or more routines that are located at one or more addresses that are

3 associated with said type via an associative structure.

1 9. (Currently Amended) A computer-readable storage medium carrying one or more

2 sequences of instructions which, when executed by one or more processors, causes

3 the one or more processors to perform the method recited in Claim 1.

1   10.   (Currently Amended) A computer-readable <u>storage</u> medium carrying one or more

2   sequences of instructions which, when executed by one or more processors, causes

3   the one or more processors to perform the method recited in Claim 2.

1   11.   (Currently Amended) A computer-readable <u>storage</u> medium carrying one or more

2   sequences of instructions which, when executed by one or more processors, causes

3   the one or more processors to perform the method recited in Claim 3.

1   12.   (Currently Amended) A computer-readable <u>storage</u> medium carrying one or more

2   sequences of instructions which, when executed by one or more processors, causes

3   the one or more processors to perform the method recited in Claim 4.

1   13.   (Currently Amended) A computer-readable <u>storage</u> medium carrying one or more

2   sequences of instructions which, when executed by one or more processors, causes

3   the one or more processors to perform the method recited in Claim 5.

1   14.   (Currently Amended) A computer-readable <u>storage</u> medium carrying one or more

2   sequences of instructions which, when executed by one or more processors, causes

3   the one or more processors to perform the method recited in Claim 6.

1   15.   (Currently Amended) A computer-readable <u>storage</u> medium carrying one or more

2   sequences of instructions which, when executed by one or more processors, causes

3   the one or more processors to perform the method recited in Claim 7.

1 16. (Currently Amended) A computer-readable storage medium carrying one or more

2 sequences of instructions which, when executed by one or more processors, causes

3 the one or more processors to perform the method recited in Claim 8.

1 17. (New) The method of Claim 1, further comprising:

2 said program registering, with said loader application, said one or more routines,

3 which are not implemented by said loader application; and

4 in response to said program registering said one or more routines with said loader

5 application, said loader application adding, to a dispatch table, an entry that

6 indicates an association between said one or more routines and an opaque type

7 implemented by said program.

1 18. (New) The method of Claim 1, wherein invoking said one or more routines

2 comprises:

3 said loader application invoking at least one of said one or more routines to find out

4 (a) a number of one or more attributes within an opaque type and (b) one or

5 more types of said one or more attributes within said opaque type; and

6 said loader application invoking at least one of said one or more routines to populate,

7 with values of instances of the opaque type, elements of an array that is stored

8 in a memory space of said loader application.

1 19. (New) A computer-readable storage medium carrying one or more sequences of

2 instructions which, when executed by one or more processors, causes the one or more

3 processors to perform the method recited in Claim 17.

1   20.   (New) A computer-readable storage medium carrying one or more sequences of

2   instructions which, when executed by one or more processors, causes the one or more

3   processors to perform the method recited in Claim 18.